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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/820,259	03/28/2001	Susumu Yoshida	2500.65361	1995

7590 08/23/2004

Patrick G. Burns, Esq.  
GREER, BURNS & CRAIN, LTD.  
Suite 2500  
300 South Wacker Dr.  
Chicago, IL 60606

EXAMINER
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SHAKERI, HADI

ART UNIT	PAPER NUMBER
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3723

DATE MAILED: 08/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/820,259

**Applicant(s)**

YOSHIDA ET AL.

**Examiner**

Hadi Shakeri

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03/22/04 (RCE).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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**DETAILED ACTION*****Claim Objections***

1. Claim 16 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. In an article claim limitations given to the workpiece does not further limit the parent claim.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

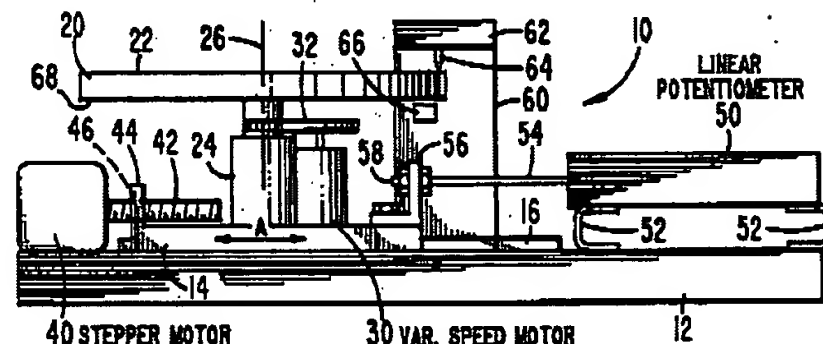
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by

Moldovan et al.

Moldovan et al. discloses all of the limitations of claims 1 and 15, i.e., an apparatus designed to texture a substrate comprising a rotational spindle (22) supported for rotation in an attitude perpendicular to a predetermined datum plane, said rotational spindle receiving the substrate (64); a contact member (14) supported for movement in radial direction of the rotational spindle along the datum plane; and a drive (30) connected to the rotational spindle so as to vary a rotation rate of the rotational spindle in response to movement of the contact member by a control means (col. 1, line 64), wherein the movement of the contact member causes a texture spreading over a surface of the substrate, e.g. micro scratches.



Regarding claim 16, Moldovan et al. meets the limitations, as indicated above limitations given to the workpiece fails to further limit the apparatus being claimed.

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4. Claims 1, 2, 4, 5, 15, 16 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Hammond.

Hammond discloses all of the limitations of claims 1, 4 and 15, i.e., an apparatus and a method for texturing a magnetic hard disk, with a rotational spindle (32) rotating the workpiece in a predetermined plane, a contact member (44) supported for movement in a radial direction (64, 62), a drive (138) connected to the spindle for rotation of spindle, a controller connected to the drive and the urging force for

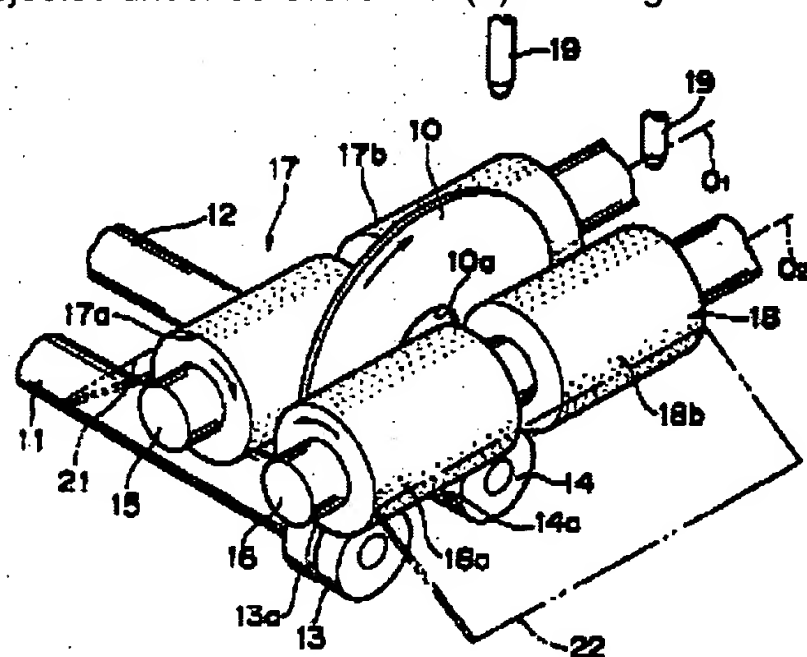
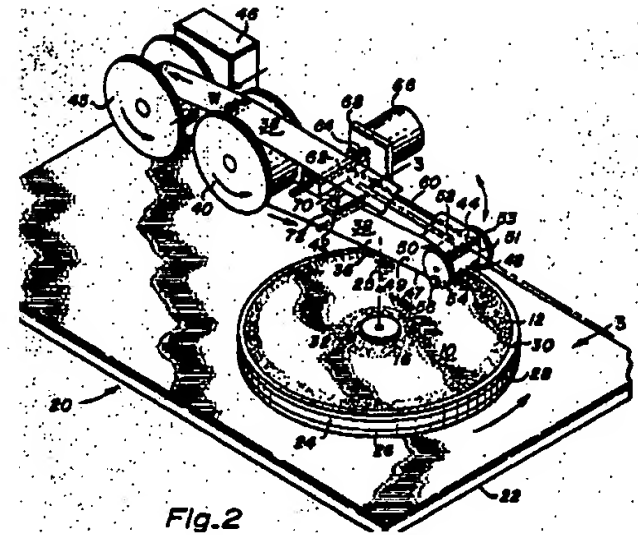
controlling the urging force wherein a ratio between the relative velocity and the urging force is maintained constant, i.e., at a constant speed and constant urging force a ratio between the urging force and the velocity is also constant for a specific location along the radial direction.

Regarding claims 2, 5 and 16, Hammond meets the limitations.

Regarding claim 20, the language as recited is considered met, since it is narrative and fails to positively recite a step, e.g., --...further including a step of controlling the drive and the urging force adjuster according to...--.

5. Claims 1, 2, 4, 5, 15-17, 19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Iwata et al. (6,033,522).

Iwata et al. discloses all of the limitations of claims 1, 4 and 15, i.e., an apparatus and a method for texturing a magnetic hard disk, with a rotational spindle (11, 12) rotating the workpiece in a



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predetermined plane, a contact member (17, 18) supported for movement in a radial direction, a drive (15, 16) connected to the spindle for rotation of spindle, a controller connected to the drive and the urging force for controlling the urging force wherein a ratio between the relative velocity and the urging force is maintained constant "*along the radial direction*" (col. 5, lines 40-45).

Regarding claims 2, 5, 16, 17, 19 and 20, Iwata et al. meets the limitations, as indicated above.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2, 4, 5, 15-17, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hammond in view of either Moldovan et al or Iwata et al.

Hammond discloses all the limitations of claims 1, 4 and 15, i.e., an apparatus and a method for texturing a magnetic hard disk, with a rotational spindle (32) rotating the workpiece in a predetermined plane, a contact member (44) supported for movement in a radial direction (64, 62), a drive (138) connected to the spindle for rotation of spindle, except for disclosing maintaining a ratio between the relative velocity and the urging force constant *all along the radial direction*. Both Moldovan et al. and Iwata et al. teach controlling the speed of rotation of the lap with respect to the relative radial position of the workpiece and the lap. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the invention of Hammond with controlling the speed of the spindle in response to the radial position of the tape as taught by either Moldovan et al. or Iwata et al. to maintain a constant lapping speed with respect to the workpiece while it traverses the lapping surface for uniform texturing.

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Regarding claims 2, 5, 16, 17, 19 and 20,, i.e., a reciprocating movement and constant urging force, Hammond in view of by either Moldovan et al. or Iwata et al. meets the limitations.

***Allowable Subject Matter***

8. Claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Note that claim 18 should also be amended to recite the invention as disclosed, i.e., maintaining a ratio between the relative velocity and the urging force constant *all along the radial direction* in which case a properly recited and amended claim 20, would also be allowable over prior art of record.

***Response to Arguments***

9. Applicant's arguments filed 11/03/03 have been fully considered but they are not persuasive.

The argument that the teaching reference (Moldovan et al.) discloses an apparatus different than the base reference (Hammond) is no persuasive, since both teach a lapping or an abrading apparatus designed to lap, abrade or polish a workpiece.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., maintaining a constant ratio along the radial direction) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hadi Shakeri whose telephone number is 703-308-6279. The examiner can normally be reached on Monday-Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J. Hail, III can be reached on 703-308-2687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Hadi Shakeri', is written over a rectangular stamp area.

Hadi Shakeri  
Primary Examiner  
Art Unit 3723  
August 19, 2004